REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

The specification has been amended to incorporate several minor changes.

Claim 4 has been amended, without narrowing the claim scope, to address the minor issue raised on page two of the Official Action. Accordingly, withdrawal of the claim rejection based on the second paragraph of 35 U.S.C. § 112 is respectfully requested.

Appreciation is expressed to Examiner King for the indicated allowability of Claims 2-8 and 13-16. Claim 2 has been amended to include the subject recited in independent Claim 1, and Claim 1 has been canceled. It is thus submitted that Claims 2-8 are allowable. Also, the obviousness-type double patenting rejection is rendered moot.

Independent Claim 9 has been placed in independent form by incorporating the subject matter recited in independent Claim 1. Claim 9 thus now defines a braking force distribution control device comprised of a wheel speed detector for detecting wheel speeds of vehicle wheels, road surface μ slope estimating means which estimates for the respective wheels, on the basis of the detected wheel speeds, slopes of a coefficient of friction μ between the wheels and a road surface as road surface μ slopes, and a controller that distributes braking forces to the respective wheels by controlling the braking force of each wheel on the basis of the road surface μ slopes estimated for the respective wheels by the road surface μ estimating means. The controller includes a wheel target braking force

computing means that computes target braking forces of the respective wheels based on the

estimated road surface μ slopes of the respective wheels and a target braking force of the

vehicle, and a braking force control means for controlling the braking forces of the

respective wheels based on the computed target braking forces of the respective wheels.

The Official Action observes that Japanese Published Application No. 11-020649

discloses a braking force distribution control device having all of the features recited in

independent Claims 1 and 9. That rejection is respectfully traversed for at least the

following reasons.

Initially, it is to be noted that Japanese Published Application No. 11-020649 has

apparently not been made of record in this application. That is, it does not appear that the

'649 Japanese document was cited on form PTO-892. The Examiner is thus respectfully

requested to identify the cited Japanese document on form PTO-892 in the next official

communication.

It is noted also that an Information Disclosure Statement was filed in connection

with this application on August 3, 2001. An initialed, signed and dated copy of form

PTO-1449 submitted with that Information Disclosure Statement has not yet been returned.

It appears that perhaps an initialed, signed and dated copy of that form PTO-1449 was

intended to be included with the most recent Official Action, but a copy of was

inadvertently omitted. The Examiner is thus respectfully requested to provide an initialed,

signed and dated copy of the form PTO-1449 submitted with the Information Disclosure

Statement filed on August 3, 2001. In connection with this matter, one of the documents

cited in that Information Disclosure Statement is Japanese Published Application No.

4-224449. Through an inadvertent typographical error, this document was listed on the

form PTO-149 as Japanese document No. 4-22449. Thus, attached is a revised version of

form PTO-1449 in which the Japanese document is correctly identified. The Examiner is

thus respectfully requested to confirm consideration of these documents by initialing,

signing and dating the enclosed additional copy of form PTO-1449.

Turning to the rejection set forth in the Official Action, the Official Action seems to

imply that the '649 Japanese document discloses a wheel target braking force computing

means that computes target braking forces of the respective wheels based on the estimated

road surface μ slopes of the respective wheels and a target braking force of the vehicle.

However, such a feature is not disclosed in the '649 Japanese document. Thus, the

claimed braking force distribution control device recited in independent Claim 9 cannot be

anticipated by the disclosure contained in the '649 document. Accordingly, withdrawal of

that rejection and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application or should the

Examiner believe that a telephone conference with the undersigned would be helpful in

resolving any remaining issues pertaining to this application, the undersigned respectfully

requests that he be contacted at the number indicated below.

Respectfully submitted,

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By: _____

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Date: January 24, 2003

Attachment to Amendment dated January 24, 2003

Mark-up of Specification

Page 37, Paragraph Beginning at Line 8

Namely, the braking torque slope or the driving torque slope may be computed on the basis of time series data of wheel speed which is detected each time a predetermined sampling time elapses (refer to Fig. 1 and the like of [Japanese Patent Application] JP-A No. 10-114263).

Page 37, Paragraph Beginning at Line 13

Further, the braking torque slope may be computed on the basis of time series data of wheel deceleration which is detected each time a predetermined sampling time elapses, and on the basis of the braking torque detected each time a predetermined sampling time elapses or time series data of a physical amount which relates to this braking torque (refer to Figs. 2, 3 and the like of [Japanese Patent Application] JP-A No. 10-114263).

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Mark-up of Claims 2, 4 and 9

2.   (Amended) A braking force distribution control device [according to claim 1,]

comprising:

wheel speed detecting means for detecting wheel speeds of respective wheels of a

vehicle;

road surface μ slope estimating means for, on the basis of the detected wheel

speeds, estimating for the respective wheels slopes of a coefficient of friction μ between the

wheels and a road surface as road surface μ slopes;

control means for, on the basis of the road surface μ slopes estimated for the

respective wheels by the road surface μ slope estimating means, distributing braking forces

to the respective wheels by controlling the braking force of each wheel; and

wherein on the basis of the detected wheel speeds, the road surface μ slope

estimating means estimates slopes of braking forces with respect to wheel slip speeds as the

road surface μ slopes for the respective wheels, and the control means controls a braking

torque of a wheel which is an object of control on the basis of the road surface μ slope of

the wheel which is an object of control and the road surface μ slope of a reference wheel

among the road surface μ slopes estimated by the road surface μ slope estimating means.

4.   (Amended) A braking force distribution control device according to claim 3,

wherein when the control means one of maintains and reduces the braking torque of one of

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Mark-up of Claims 2, 4 and 9

the rear wheels, the control means maintains the braking torque of another of the rear

wheels [as is].

9. (Amended) A braking force distribution control device [according to claim 1,]

comprising:

wheel speed detecting means for detecting wheel speeds of respective wheels of a

vehicle;

road surface μ slope estimating means for, on the basis of the detected wheel

speeds, estimating for the respective wheels slopes of a coefficient of friction μ between the

wheels and a road surface as road surface μ slopes;

control means for, on the basis of the road surface μ slopes estimated for the

respective wheels by the road surface μ slope estimating means, distributing braking forces

to the respective wheels by controlling the braking force of each wheel; and

wherein the control means includes:

a wheel target braking force computing means for computing target braking

forces of the respective wheels on the basis of the estimated road surface μ slopes of the

respective wheels and a target braking force of the vehicle; and

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Mark-up of Claims 2, 4 and 9

a braking force control means for controlling the braking forces of the

respective wheels on the basis of the computed target braking forces of the respective

wheels.